

Work Order ID 68635

Tuesday, April 19, 2011 11:56:00 AM

*Eagle*

Page 1

Item ID: D412-742-041

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube

Stop



Start Date: 4/19/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/6/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *mf* Date: *11-04-19* Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H								

100

0.00



DOCUMENT CONTROL

DC

0.00

Document Control

MemoIf D412-742-041 is a W/O on it's own,
Photocopy bluefile and create labels per PPP D412-742-041 CHG004*N/A*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Setup Start



Revision ID:

Item Name: Replacement Float Skidtube

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Start Date: 4/19/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/6/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____



Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	HandFinishing	0.00							
	HandFinish								
Hand Finishing	Memo	0.00				1	6	24	11/05/10
	1-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins. A/R <input type="checkbox"/> Sikaflex-241/-291 <input type="checkbox"/> 1116945 Expiry date: <input type="checkbox"/> 12/01								
	2-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex. A/R <input type="checkbox"/> Sikaflex-241/-291 <input type="checkbox"/> 1116945 Expiry date: <input type="checkbox"/> 12/01								
	3-Remove "T" pins once sikaflex is dry.								
	4-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser. A/R <input type="checkbox"/> LPS Procyon <input type="checkbox"/> 1114596								
120	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
Quality Control	Memo	0.00							

(24)

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Setup Start

Revision ID:

Stop

Item Name: Replacement Float Skidtube

Start Date: 4/19/2011 Start Qty: 1.00

Cust Item ID:

Required Date: 5/6/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-742-041
□ Location: _____ □ PPP Rev: _____

PPP 68631

140

0.00



QC

QC21- Final Inspection - Work Order Release

Memo

0.00

Quality Control

ME

11-05-12

Picklist Print

Tuesday, April 19, 2011 11:55:53 AM

Page 1

Work Order ID: 68635

Parent Item: D412-742-041

Parent Item Name: Replacement Float Skidtube



Start Date: 4/19/2011

Required Date: 5/6/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev A 05.10.13 New Issue KJ/JLM
 IPP Rev B 06.02.13 ECN 773 dwg @ rev.D EC
 IPP Rev:C 07-05-28 As per Rev F JLM
 IPP rev D 07.11.01 ecn 1053p EC
 IPP rev E 07.11.27 ecn 1072 EC verified by:DD
 IPP Rev:F 08-09-08 ecn 08-510 DD verified by:EC IPP Rev:G
 10.02.24 as per ECN10-514 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN3C4A		Purchased	No			110	Each	2,358.000	24	24			
BOLT													

Location	Loc Qty	Loc Code
ST350	2358	
116924	358	
117094	1000	
117313	1000	

AN3C6A		Purchased	No			110	Each	224.0000	12	12			
BOLT													

Location	Loc Qty	Loc Code
FP-A	1	
111982	1	
ST351	223	
111982	2	
116419	71	
116549	50	
116704	100	

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Page 2

Work Order ID: 68635

Parent Item: D412-742-041

Parent Item Name: Replacement Float Skidtube

Start Date: 4/19/2011

Required Date: 5/6/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C7A	Purchased	No	110	Each	171.0000	8	8
							<u>44 4/05/10</u>
BOLT							

Location	Loc Qty	Loc Code
ST351	171	
113149	30	
116169	41	
117313	100	

AN960C10L	Purchased	No	110	Each	0.0000	44	44
							<u>(x44) 44 4/05/10</u>
washer							

AN960C416L	Purchased	No	110	Each	8.0000	4	4
							<u>(x4) 44 4/05/10</u>
WASHER							

Location	Loc Qty	Loc Code
ST350	8	
112828	8	

D3391-011	Manufactured	No	110	Each	0.0000	1	1
							<u>(x1) 44 4/05/10</u>
Fwd Tube Assembly							

D3391-013	Manufactured	No	110	Each	0.0000	1	1
							<u>(x1) 44 4/05/10</u>
Mid Tube Assembly							

D3391-015	Manufactured	No	110	Each	0.0000	1	1
							<u>(x1) 44 4/05/10</u>
Aft Tube Assembly							

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Shop Packet Print

Page 2

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Page 3

Work Order ID: 68635

Parent Item: D412-742-041

Parent Item Name: Replacement Float Skidtube

Start Date: 4/19/2011

Required Date: 5/6/2011

Start Qty: 1.00

Required Qty: 1.00

D3564-1

Manufactured No

110

Each

17.0000

1

1



Wearshoe



xl 11/05/10

Location

Loc Qty

Loc Code

FG

2

33798

2

FP019

15

58823

1

64747

14

xl

D3564-3

Manufactured No

110

Each

14.0000

1

1



Wearshoe



xl 11/05/10

Location

Loc Qty

Loc Code

FG

2

33764

2

FP019

12

62835

3

64748

5

66000

4

xl

D3564-5

Manufactured No

110

Each

24.0000

1

1



Wearshoe



xl 11/05/10

Location

Loc Qty

Loc Code

FG

2

34806

2

FP019

22

66551

10

67588

12

xl

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Page 3

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Tuesday, April 19, 2011 11:55:53 AM

Page 4

Work Order ID: 68635

Parent Item: D412-742-041



Parent Item Name: Replacement Float Skidtube

Start Date: 4/19/2011

Required Date: 5/6/2011



Start Qty: 1.00

Required Qty: 1.00

D3566-1	Manufactured	No	110	Each	36.0000	2	2
							<u>u105110</u>
Gasket							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP015	36	
<u>68344</u>	36	

D3566-5	Manufactured	No	110	Each	27.0000	1	1
							<u>u105110</u>
Gasket							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP015	27	
66552	5	
<u>67589</u>	22	

D3591-1	Manufactured	No	110	Each	59.0000	2	2
							<u>u105110</u>
Bushing							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST068	59	
<u>57350</u>	22	
66147	37	

D3672-3	Manufactured	No	110	Each	967.0000	4	4
							<u>u105110</u>
Phenolic Washer							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST074	967	
<u>64176</u>	967	

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Parent Item: D412-742-041



Parent Item Name: Replacement Float Skidtube

Start Date: 4/19/2011

Required Date: 5/6/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039C4-12

Purchased

No

110

Each

35.0000

4

4



SCREW

110510

Location

Loc Qty

Loc Code

FP-B

35

114221

35

x4

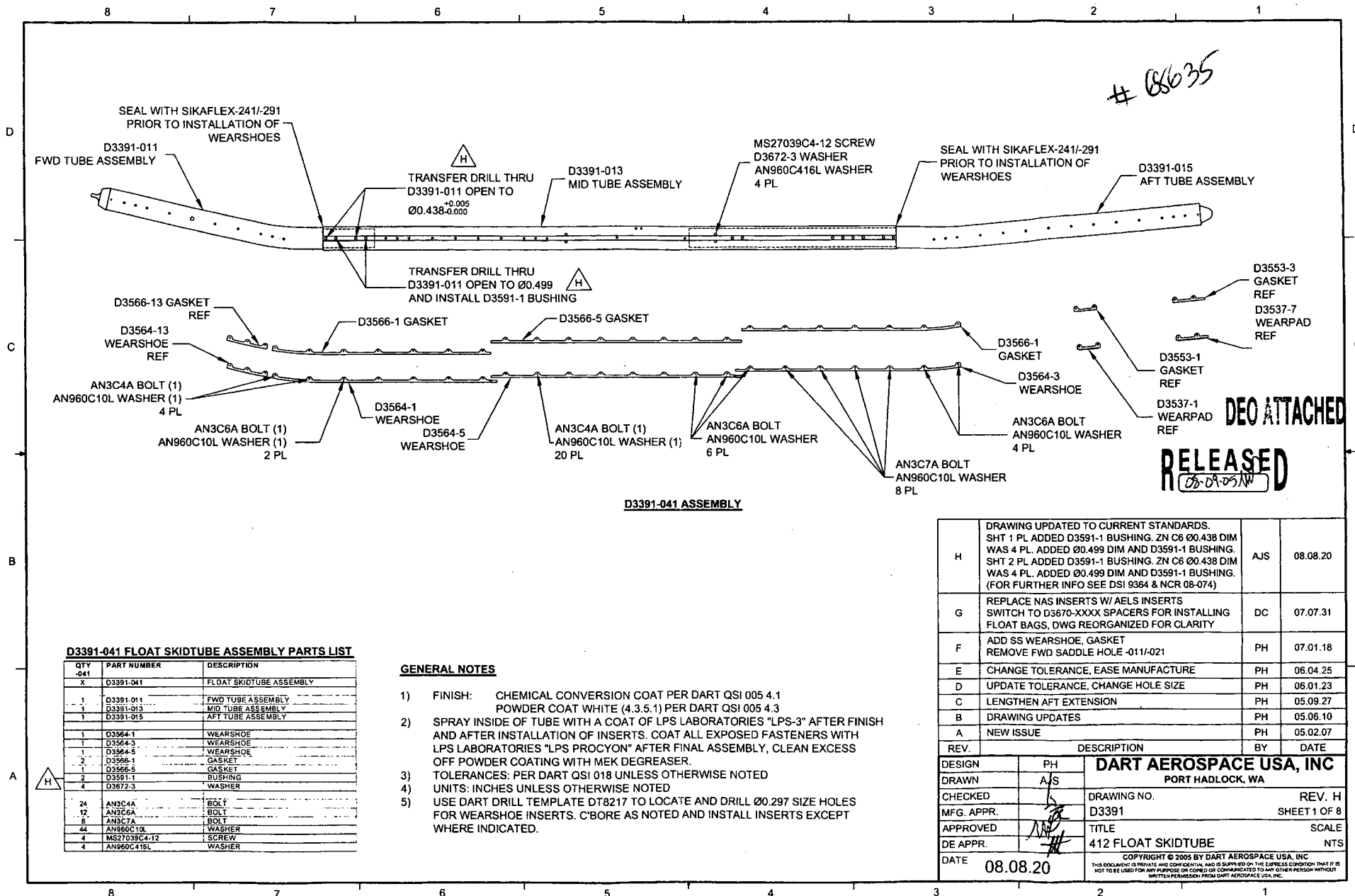
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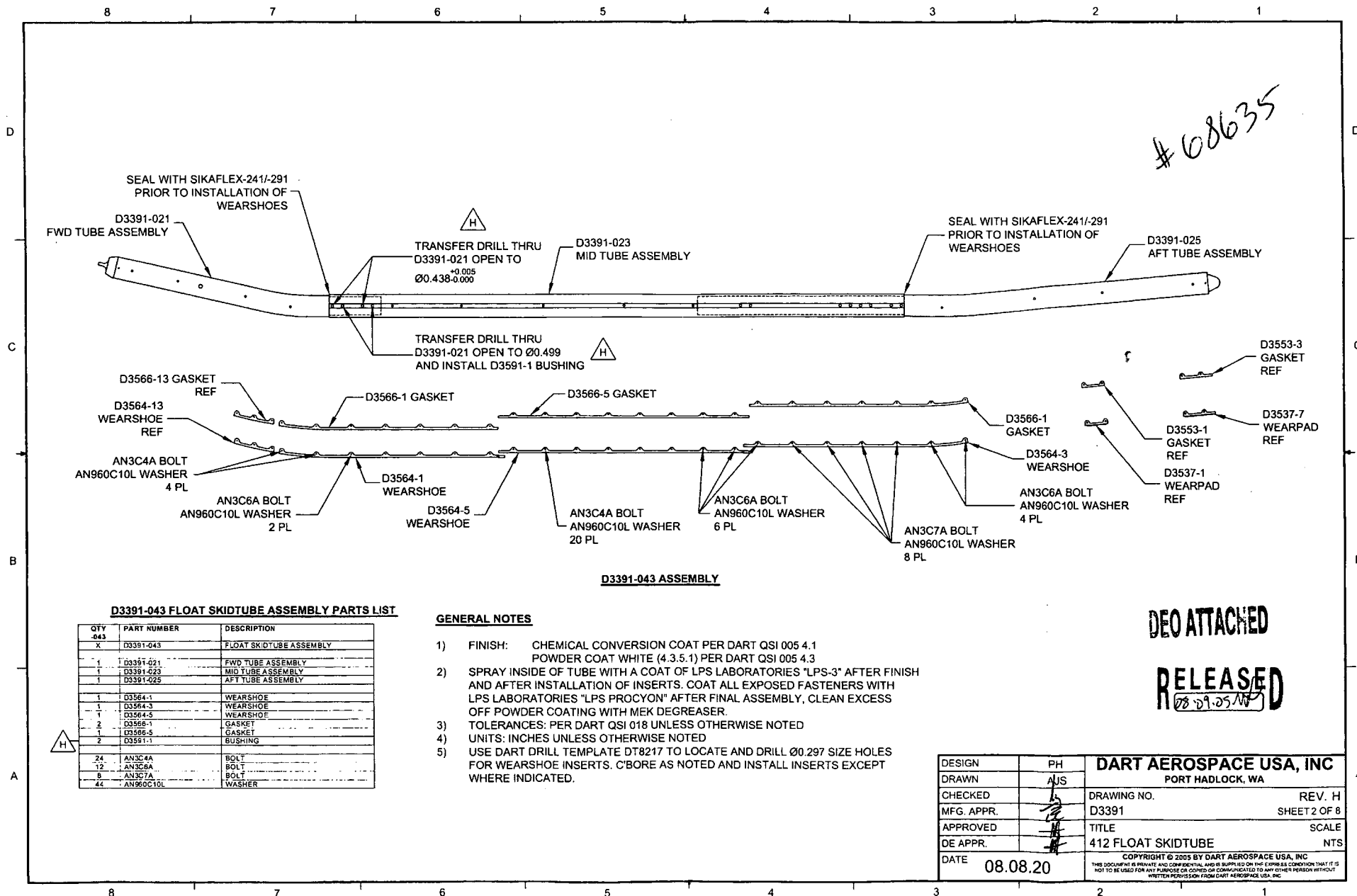
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#68635



D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3561-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
9	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. CBORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

DEO ATTACHED

RELEASED

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AUS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
OE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	<small> COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC. </small>	

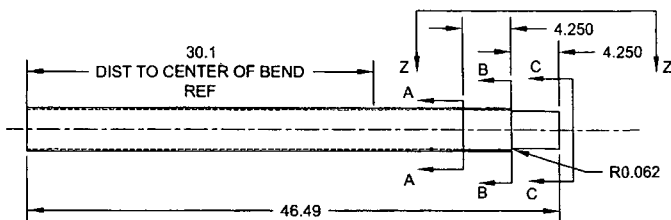
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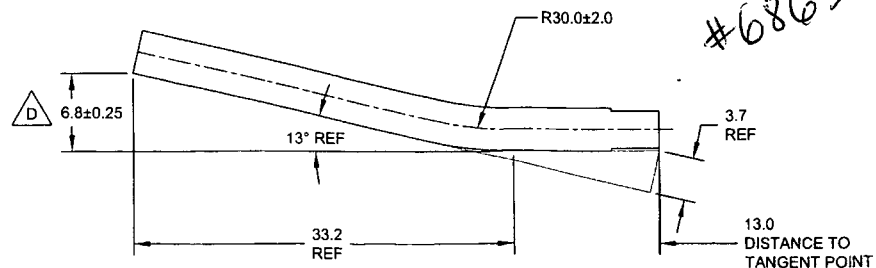
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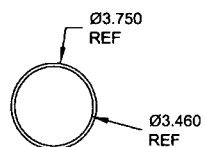
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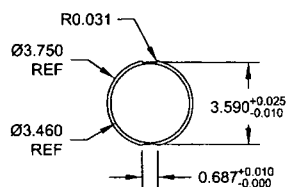
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



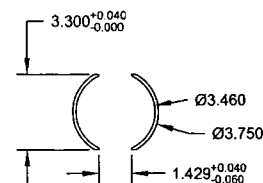
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



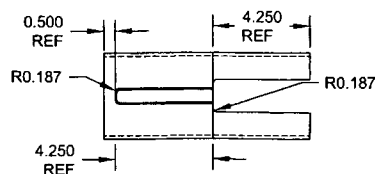
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

DEO ATTACHED
RELEASED
08-05-11

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 3 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	
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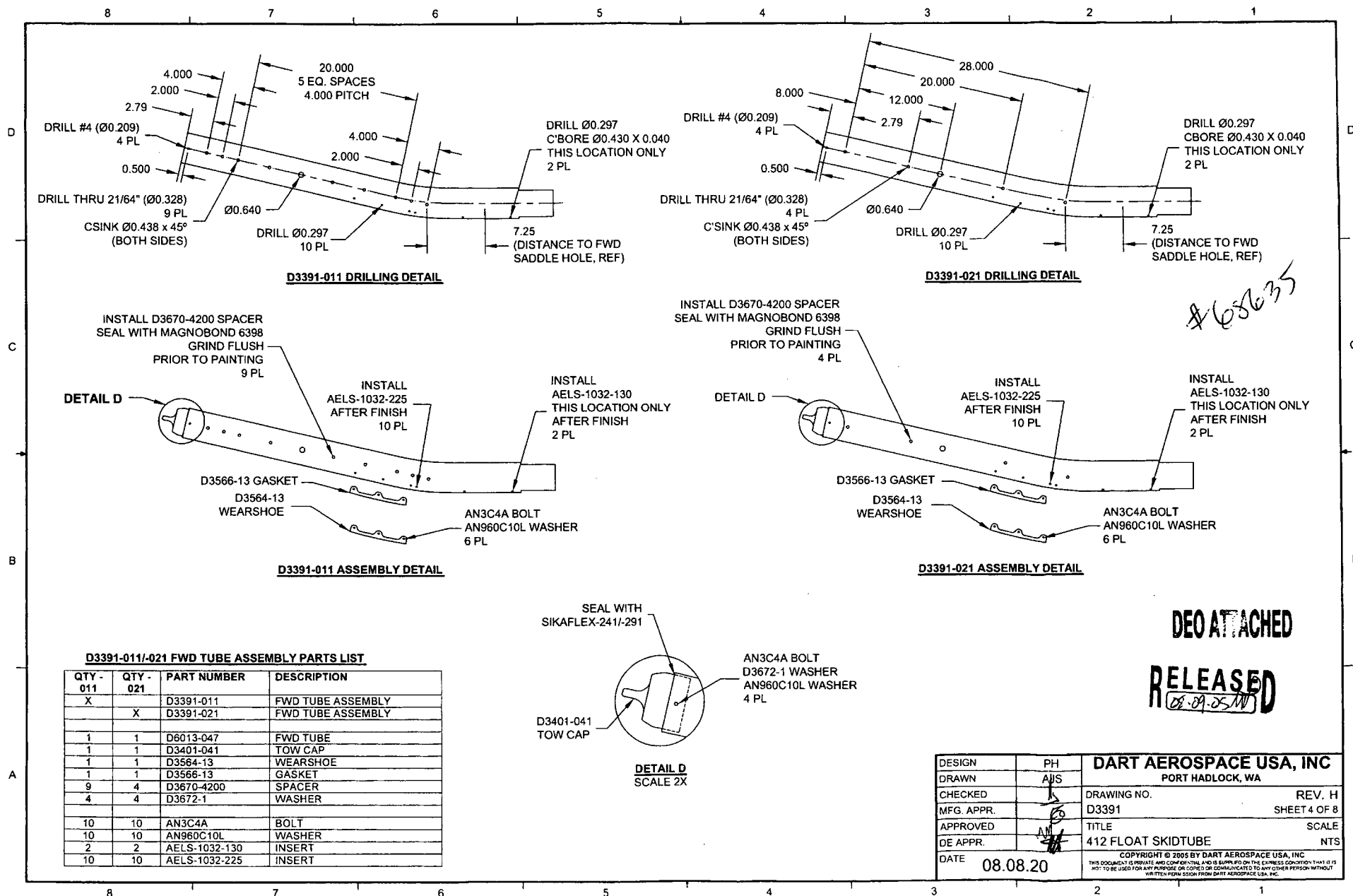
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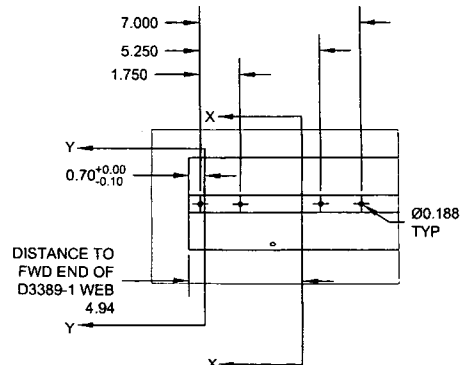
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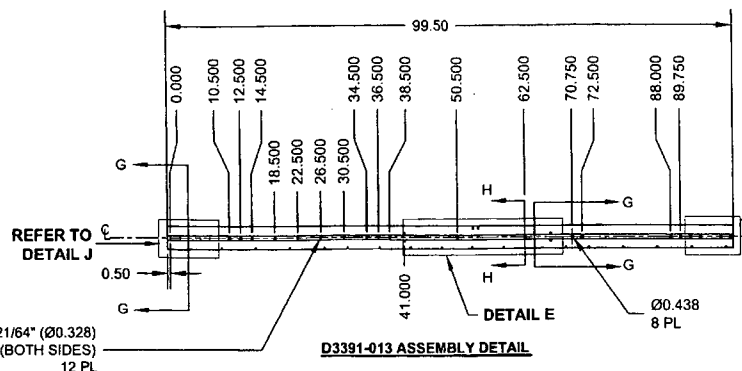
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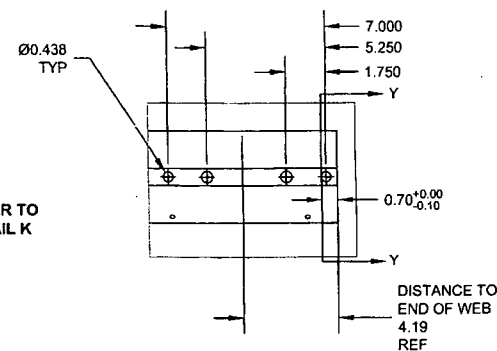


DETAIL J
SCALE 4X

DRILL THRU 21/64" (Ø0.328)
CSINK Ø0.438 X 45° (BOTH SIDES)
12 PL



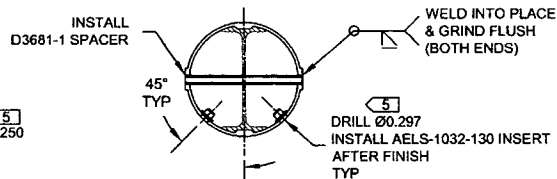
D3391-013 ASSEMBLY DETAIL



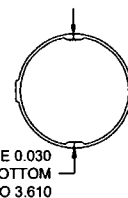
DETAIL K
SCALE 4X



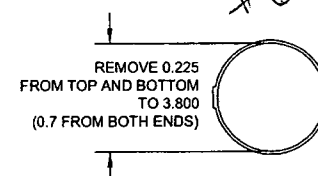
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



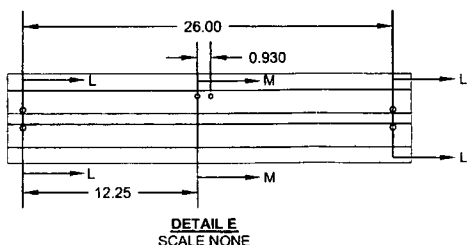
SECTION Y-Y
SCALE 5X

D3391-013 MID TUBE ASSEMBLY PARTS LIST

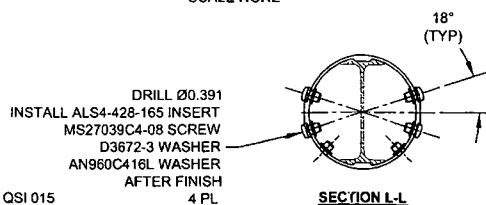
QTY	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

D3391-013 MID TUBE ASSEMBLY

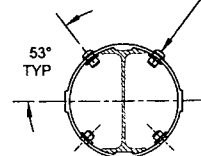
- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- WELDING: PER DART QSI 004



DETAIL E
SCALE NONE

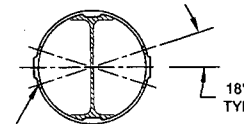


SECTION L-L
SCALE 5X



SECTION M-M
SCALE 5X

DRILL Ø0.250
4 PL



SECTION LL-LL
SCALE 5X

DEO ATTACHED

RELEASED

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MFG. APPR.		D3391	SHEETS OF 8
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DE APPR.		412 FLOAT SKIDTUBE	NTS
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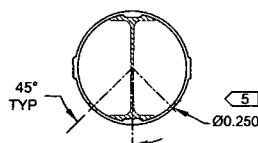
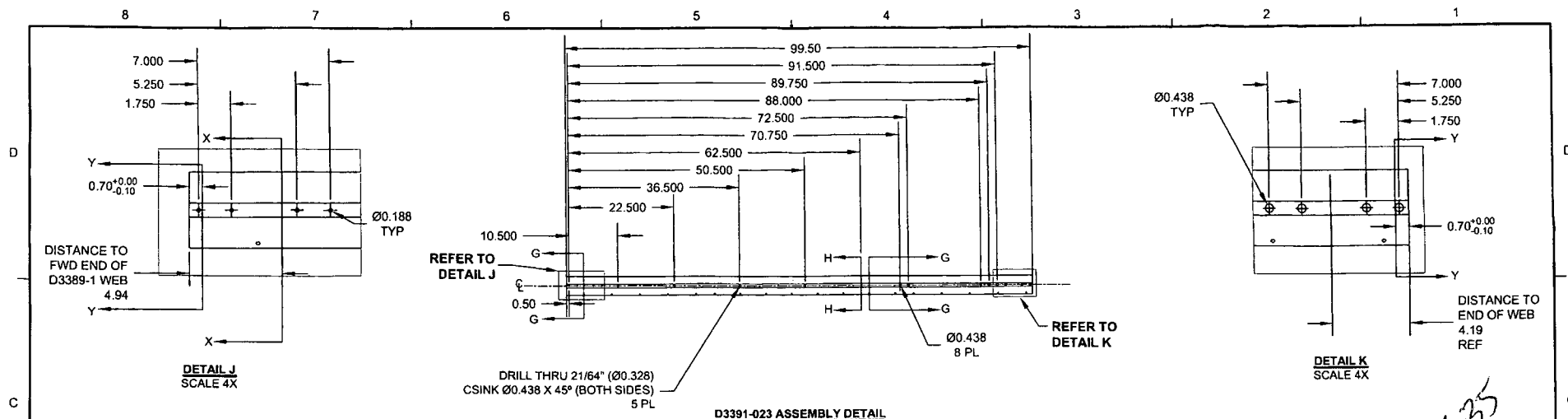
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

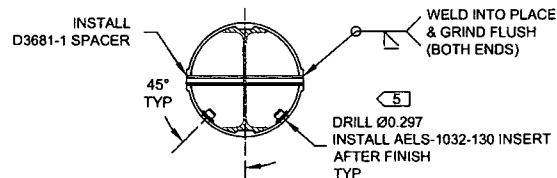
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

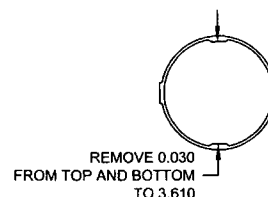
NOTE: Date & initial all entries



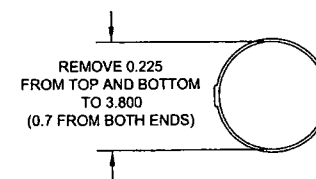
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



SECTION Y-Y
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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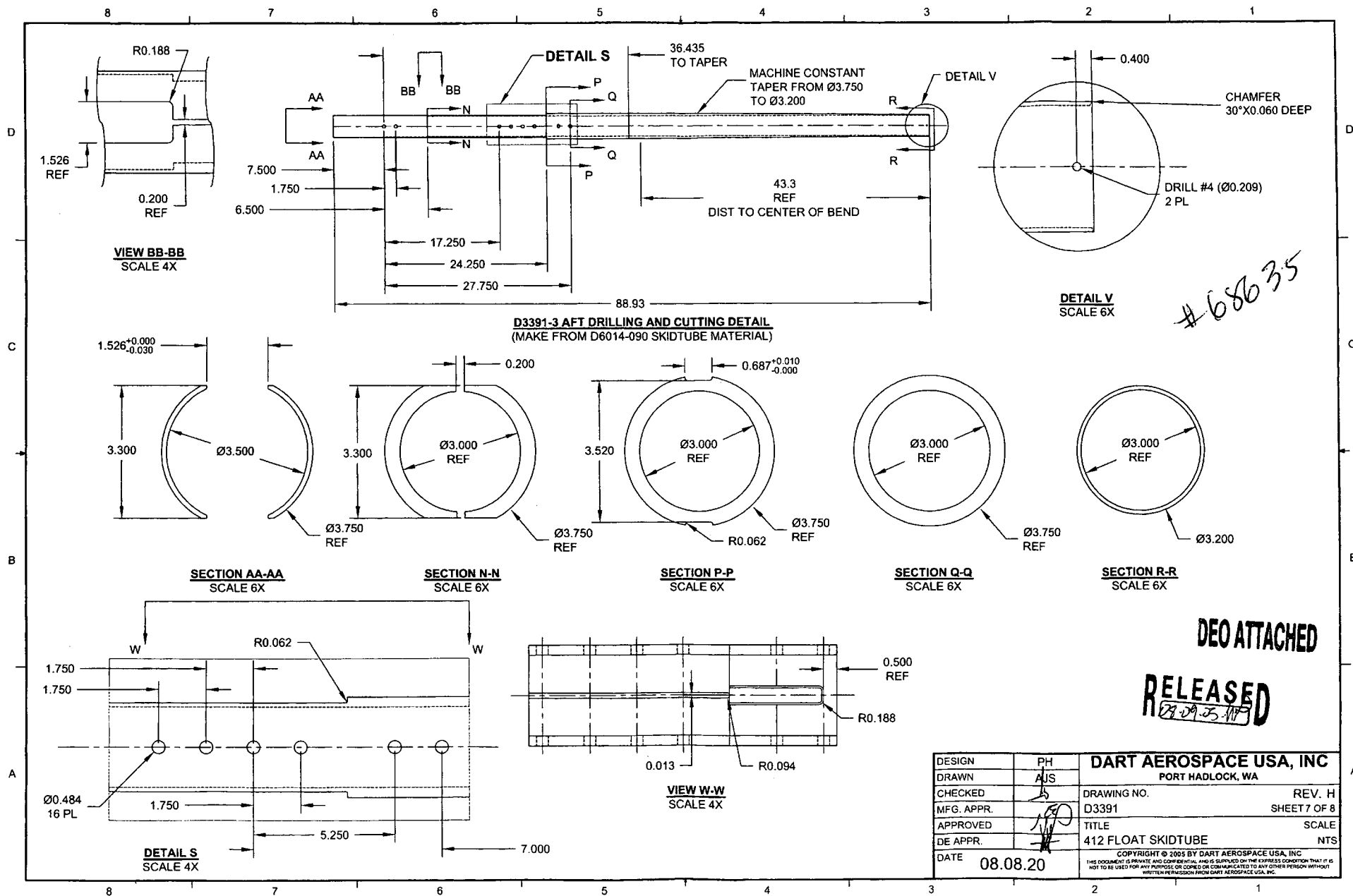
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



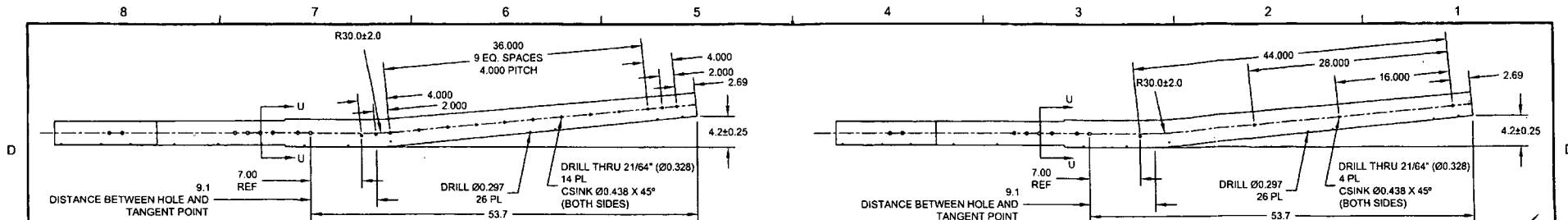
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

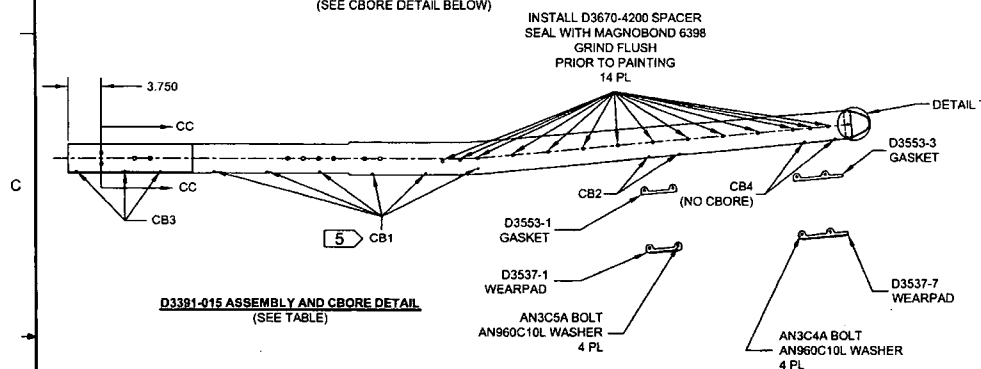
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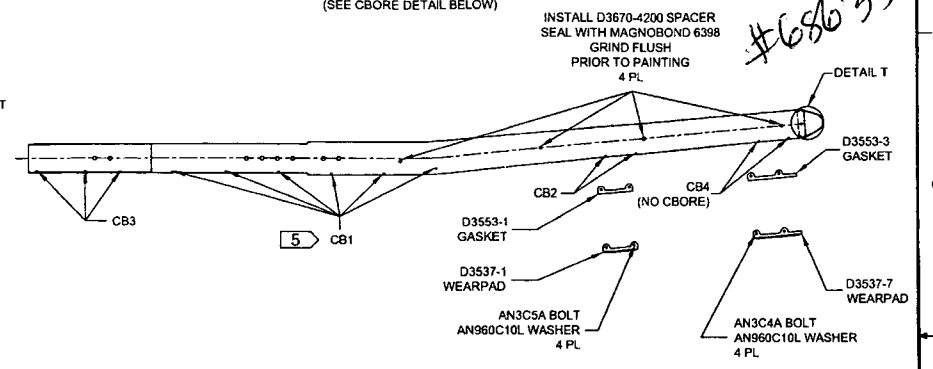


D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)

D3391-025 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



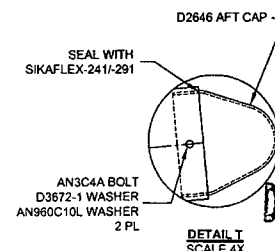
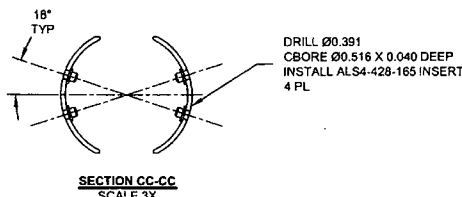
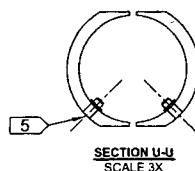
D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)



D3391-025 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
X	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4	4	ALS-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER



CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	12	12	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

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MFG. APPR.		D3391	SHEET 8 OF 8
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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DRAWN <i>CP</i>	CHECKED <i>l</i>	MFG. APPR. <i>MA</i>	APPROVED <i>MP</i>		DE APPR. <i>MP</i>		
DATE 09.09.23	DATE <i>06.09.24</i>	DATE <i>09/09/25</i>	DATE <i>09/09/30</i>		DATE <i>09/09/30</i>		

PURPOSE:

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/-043 SKIDTUBES.

CHANGE:

AMEND NOTE 2 OF D3391-041/-043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

- 2) ~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH~~
~~AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH~~
 LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
 OFF POWDER COATING WITH MEK DEGREASER.

RELEASED
 2010-02-02

MP

#65635

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries